

SAPC 4884
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30 March 1956

MEMORANDUM FOR: Project Contracting Officer

SUBJECT : Trip Report of the 14-17 March Visit to the
Eastman Kodak Processing Plant by [redacted]

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1. Film Evaluation - 24" F/L Photography

a. Density - The photography viewed on previous visits has been far too dense. (estimated 2 - 4 f/stops over-exposed). Kycen had installed 24" A filters (red) to reduce the exposure. The density was very much improved though a formal evaluation has not yet been made by Eastman Kodak.

b. 6" F/L photography was available for viewing, but photography viewed in the past has not been over-exposed consistently as has the 24" F/L photography.

Filters are only one possible means of reducing the exposure of 24" F/L photography, but are probably the easiest to incorporate, at least for initial operations. Eastman Kodak felt no photo interpretation problems would result from utilizing 24" A filters, as long as the interpreters are aware of the filters used and their characteristics.

b. Small Blurred Areas on Film - On the rapid scan of film rolls, areas, a few square inches in size and larger, appeared blurred. No pattern as to location, size, and frequency of these blurred areas was observed. These might possibly be caused by vacuum back problems, but further study will be required. This problem is a serious one.

c. Faulty Film Metering - A metering problem still exists. Differences in spacing between formats varied from approximately 1/4" to more than 1/2", but no cases of partial overlap of formats (as observed on last trip) were noticed.

d. Block Impossible to Read - Some rolls of film had no clock installed, but where it was installed, it was consistently impossible to read. This problem has existed since the first photography was received and appears to get worse with time.

e. No Exposure Counters - As yet, no exposure counters have been observed on any photography.

f. Static Electricity - Portions of roll #122 (2/21/56 A-2 Right oblique) suffered severely from static electricity. Characteristic pattern developed throughout format on several occasions.

2. Resolution Loss in "Reverse Printing" The photography taken with

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the B camera is reversed (mirror image), because of the incorporation of a mirror in the camera system. One possible solution to the problem of reversed images would be to make contact prints with the negative reversed (emulsion side facing the light source). This would result in contact prints oriented correctly, but with an undetermined loss of resolution.

The Project Contracting Officer has requested Eastman Kodak to determine the actual loss of resolution when printing with a reversed negative, under Contract EM-95.

A preliminary test made with standard base film showed a loss of resolution of over 65% (actual drop was from 20+ lines per mm to approximately 7 lines per mm). Further tests will be made utilizing thin base resolution negatives. This information is necessary for planning the utilization of B camera photography.

3. Photographing Resolution Targets [] requested test photography flown over resolution targets for determination of the resolution of operational photography.

4. Status of Eastman Kodak Processing Plant - The processing plant is not presently operational. There is no capability for printing (duplicate negatives, duplicate positives and paper prints). Even after the required printers are installed, a period of several weeks will be required before the equipment is ready for use.

During simulated missions the processing plant should be simulating their own operations in anticipation of future work.

It is doubtful the processing plant can be fully equipped and staffed in time for simulated mission support.

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Photo Intelligence Officer

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